

US EPA ARCHIVE DOCUMENT



# *UMTRCA Rulemaking- 40 CFR 192*

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**Navajo Uranium Contamination Stakeholder Workshop  
Gallup, New Mexico  
November 3, 2009**

# Overview

- **Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, as amended, Section 206**
- **Existing regulations 40 CFR 192**
- **Reason for review and potential update**
- **Issues for review**
- **Coordination and stakeholder input**



# Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, as amended, Section 206

- **Title I inactive mill sites administered by DOE**
  - EPA to develop health and environmental standards for
    - “radiological and
    - nonradiological hazards associated with residual radioactive materials located at inactive uranium mill tailings sites
  
- **Title II and future active processing sites):**
  - Required EPA to develop standards “...for the protection of the public health, safety, and the environment from
    - radiological and nonradiological hazards associated with the processing, possession, transfer, and disposal of byproduct material...
    - at sites at which ores are processed primarily for their source material content or which are used for the disposal of such byproduct material”



# Uranium Mill Tailings Radiation Control Act Requirements for EPA

- **“The Administrator may periodically revise any standard...”**
- **Before the promulgation of any rule pursuant to this section, the Administrator shall:**
  - **“publish, the proposed rule in the Federal Register, together with a statement of the research, analysis, and other available information in support of such proposed rule...”**
  - **Provide a period of public comment of at least thirty days for written comments with a hearing thereafter**
  - **“The Administrator shall consult with the Commission and the Secretary of Energy before promulgation of any such rule”**



# Existing Regulations 40 CFR 192

## Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings

- **Subpart A. Standards for the control of residual radioactive materials from inactive uranium processing sites**
- **Subpart B. Standards for cleanup of land and buildings contaminated with residual radioactive materials from inactive uranium processing sites**
- **Subpart C. Implementation**



## Existing Regulations 40 CFR 192

- **Subpart D. Standards for management of uranium byproduct materials pursuant to Section 84 of the Atomic Energy Act as Amended**
- **Subpart E. Standards for management of thorium byproduct materials pursuant to Section 84 of the Atomic Energy Act of 1954, as Amended**



# Existing Regulations 40 CFR 192

**Regulations provide standards for mills for:**

- **Radiation protection of the public and occupational workers**
- **Radon emissions**
- **Surface and groundwater protection including monitoring and restoration**
- **Reclamation standards for radiologically contaminated soil and buildings**
- **Tailings impoundment construction requirements**





## Reason for Review and Potential Update

- **Over 25 years since originally finalized, ~15 years since last update for groundwater protection**
- **Lacks explicit provisions for In Situ Leach/Recovery (ISL/ISR), now principal means of uranium recovery in U.S., and for heap leach facilities**
- **Changes in EPA protective standards for hazardous substances in groundwater and drinking water**
- **Changes in economics of extraction & site remediation**



## Reason for Review and Potential Update

- **Changes in dose factors for radiation/radon, principal scenarios for exposure, free release of sites (ISL/ISR's) after decommissioning**
- **Potential for uranium extraction in different geographic locations than those considered in risk assessments in previous standards**
- **Court case negating provision of regulations—EPA concurrence in NRC ACL determinations**



# Issues for Review

- **Are provisions for Title I and other closed sites still protective, and should those sites be grandfathered?**
- **How should radiation, radon release, groundwater and surface water protection standards be revised due to
  - **new EPA standards,**
  - **updated exposure scenarios and dose factors,**
  - **historical production and economic data?****
- **How should existing regulatory framework of 40 CFR 192 be applied to ISL/ISR operations?**



# Issues for Review

- **What protective standard should be selected for lead in groundwater?**
- **How to reconcile NRC proposed ISL/ISR groundwater protection standards (10 CFR 40, Appendix A) with revised 40 CFR 192?**



# Issues for Review

- **How to balance environmental compliance costs and benefits?**
- **How to ensure that environmental justice, children's health and Tribal concerns are fully taken into account?**



# Coordination and Stakeholder Input

- **Development of Communications Plan**

OBJECTIVES:

- Ensure an open and transparent process for reviewing and potentially revising the standards.
- Increase awareness of the issues surrounding the potential revisions among targeted audiences.
- Provide stakeholders the opportunity to provide informal and formal input on the revisions

- **Federal Agency Coordination**

- **NRC and DOE**
- **ISCORS**

- **EPA Intra-agency Workgroup**

- **Regions – 6-10 with observers from 3 and 5**
- **HQ – OW, ORD, OSWER, OGC, OPEI**



# Coordination and Stakeholder Input

- **Tribes and Tribal organizations**
- **States**
- **Industry**
- **Environmental and other NGO's**
- **Internet site for Public**



Questions?

